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A METHOD AND DEVICE FOR ESTIMATING THE PITCH OF A SPEECH SIGNAL, USING A BINARY SIGNAL

CROSS REFERENCES TO RELATED APPLICATIONS

This application for patent claims the benefit of priority from, and hereby incorporates by reference the entire disclosure of, co-pending U.S. Provisional Application for Patent Serial No. 60/197,044, filed April 14, 2000.

**Field of the Invention**

The invention relates to a method and device for estimating the pitch of a speech signal, for example, in telephones.

**Background of the Invention**

In many speech processing systems it is desirable to know the pitch period of the speech. As an example, several speech enhancement algorithms are dependent on having a correct estimate of the pitch period. One field of application where speech processing algorithms are widely used is in mobile telephones.

A well known way of estimating the pitch period is to use the autocorrelation function, or a similar conformity function, on the speech signal. An example of such a method is described in the article D.A. Krubsack, R. J. Niederjohn, "An Autocorrelation Pitch Detector and Voicing Decision with Confidence Measures Developed for Noise-Corrupted Speech", IEEE